

LHP INC.: CHALLENGING THE ORGANIZATIONAL STRUCTURE AND CULTURE TO GROW

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LHP Inc., a Midwestern engineering and software solutions firm, was founded by two partners that developed a strong organization culture, based in responsibility, partnership, innovation, integrity and diversity. The company overcame two recessions and an established, competitive industry to find a niche serving several large-cap companies from its founding in 2001 and subsequent ten-year growth. However, in 2011, the firm faced difficult challenges to its success and continued expansion, particularly in dealing with its increasing size that threatens its small business values and organization culture. “I’m not sure we understand all the challenges we’ll be facing yet,” said LHP co-founder and President David Glass. “Managers will be stretched and they’ll need help. They’ll need to step up. Some will be ready and some won’t. How can we grow the company and also retain the core values and culture that have gotten us this far?”

HISTORICAL BACKGROUND

Founding

LHP Inc., an engineering and software solutions firm, was founded in 2001 in Columbus, Indiana, a small Midwestern city just south of Indianapolis. Its name was derived from “Left Hand Plane,” a technical reference to the stability of a closed-loop continuous control system based on Root Locus analysis, and hence, the stability the firm could offer its clients. The privately held enterprise was the creation of co-founders Ryan Hou and David Glass, who guided its growth as chief executive officer and president, respectively.

Remarkably, Hou and Glass knew very little about each other before entering the venture. They had two common threads: Cummins, Inc., a designer and manufacturer of engines and related technologies headquartered in Columbus, and spouses who worked for Cummins. Glass was an employee of Cummins for eight years working with embedded engineering systems while Hou was a supplier to Cummins for 17 years in information technology applications doing web-based development. When Glass came to the realization that his career path with Cummins wasn’t going to satisfy him, his entrepreneurial spirit started him thinking about how to better leverage his business and engineering degrees with an outside venture. He wanted something with more professional as well as personal fulfillment, including spending more time with his children. He was encouraged by management at Cummins to pursue supplier status and market his engineering expertise back to the company as a consultant. Hou had just such status and ultimately it was Hou’s wife Jean, a specialist in human resources for Cummins who had originally hired Glass, who brought the two men together. We became partners not knowing each

other very well,” said Glass. “It wasn’t like we had a ten-year history of knowing each other, but it worked out. We were pretty fortunate that our personalities clicked.”

Hou used a sports analogy to describe the relationship between himself and Glass. Both played and still enjoy basketball and as such viewed their business relationship as having strengths and weaknesses that complemented one another and formed a well-balanced team. While Hou took the role of being the external face of the firm in the community and with clients, Glass focused on finding and putting people in the right roles to accomplish the work and projects. One of Glass’s talents was finding good people, whether there was an immediate need or not, because he knew he would find a role locally for them at some point. Hou’s strong sense of community responsibility was reciprocated, helping the firm build support for its goals in both the private and public sector. “Hopefully, our passion about people and our passion about doing this type of work can affect other people, our team, and make our company grow,” said Hou.

Serendipitous as the coming together of the two men may have been, their personalities as well as their skills could not have been a better match, according to Glass. “Neither [of us] is afraid to fail,” Glass said. “The fear is not taking the risk to try something.” And with that attitude, six months later they formed LHP.

Growth

With Glass’s embedded engineering expertise and Hou’s IT savvy, the two carved out a very narrow niche to focus on embedded software applications in the crowded, competitive IT industry. Embedded systems typically control a mechanical system such as an engine, vehicle, or even a hospital bed as an independent system while often having the capability of communicating through connected PC-based software, web-based application, or mobile device with either an operator or monitoring software application. Electronic signals sent from the mechanical system are read and analyzed with the ability to send back control commands. The firm first used this integration of embedded systems and IT applications to develop a remote monitoring system for Manitowoc Crane in the initial design of its products which are now being offered to the industrial market, including Cummins. LHP grew to 10 employees by the end of the first year, 22 by the second year, and 75 by the end of the third year.

Tara Vatcher was LHP’s first employee. Vatcher, who had extensive experience in engine controls and helped to lead the projects with Cummins, was promoted to lead the embedded systems division in 2006 and later initiated the LHP Software Solutions (LSS) project-based team in 2008. Also joining the management team were Janene Stotts and Joseph Mathew. Stott became Human Resources and Recruiting Director around 2005 and then initiated the LHP Engineering Resources division (LER) in 2008. Mathew, who had developed a banking software application for Irwin Financial Corp. in Columbus, was promoted to head the IT applications division. Hou, a native of Taiwan, became president of the firm to give it status as a Minority Business Enterprise (MBE) while Glass became vice president.

The MBE status opened doors that otherwise were closed for LHP due to its size, at least in the early years. The designation established a common ground that Fortune 500 companies recognized and, in many cases, sought out due to their own requirements in using MBEs. But

both Hou and Glass recognized that quality and pricing were foregone conclusions. “You have to be qualified,” said Glass. “MBE just gets you in the door to start talking.” And as LHP grows, the MBE status continues to be an asset as opportunities become bigger and companies seek out larger, single sources.

As LHP grew, developing people and management succession plans became more important. “We have to prepare our managers for growth,” Glass said. “While we first and foremost want to promote from within, we also think it’s important to inject new people and ideas from the outside.” Consultants help in this role, providing training in areas such as employee development and external marketing. “We don’t know everything,” said Glass. “We welcome outside help and insight and that has helped LHP grow so quickly.”

Strategy and Structure

But despite this early success, almost 100 percent of the firm’s business was still with Cummins at the end of 2003. Consequently, at the start of 2004, LHP faced a major decision point about its growth. With neither Hou nor Glass trained in formal business development, Glass called on the help of a friend and graduate of the Harvard Business School executive training program to put together a five-year business strategy for them. In addition to conducting a S.W.O. T. analysis, the friend developed a Balanced Scorecard for the firm with nationally recognized Columbus Regional Hospital and a highly regarded not-for-profit organization, Foundation for Youth, as local benchmarks. By 2005, LHP had its vision and mission. “We finally did all the work that we should have done before we started,” Glass said. “Coming out of it, we had a lot better understanding of who we were, what we were trying to accomplish, and what our goals were.” The basis of that focus was establishing relationships with the right type of customers and taking a partnership mentality, which resulted in adding Batesville, Indiana-based hospital bed manufacturer Hill-Rom and Warrenville, Illinois-based truck and equipment maker Navistar to the firm’s list of clients. Also in 2005, the firm expanded from its building in downtown Columbus to a custom-built facility on the north side of the city in the new Infotech Park. LHP’s expansion did not stop there; it opened its first overseas office, LHP International, in Wuhan, China that same year to begin building relationships in the rapidly growing automotive market in that country.

A critical point in the firm’s short history came in 2008. Although LHP was founded in the middle of the 2001 recession and then the 9/11 tragedy, the 2008 recession had a much larger financial impact on the firm and it was forced to downsize its workforce. But the firm persisted and worked diligently to keep whatever business it could and to retain employees by finding new opportunities with a diversified customer base. At this point, LHP reorganized into two more focused divisions, including LHP Engineering Resources (LER) which specialized in providing engineering resources for direct, contract, or contract-to-direct placement within companies, and LHP Software Solutions (LSS) which specialized in delivering project-based work to engineering organizations. Stotts, who had extensive experience in the engineering and technical recruitment sector with Adecco Technical, changed roles within LHP to head the new division. Also, the firm’s overall organizational structure was reorganized (see Appendix A) with Hou becoming CEO, LHP Inc.; Glass, president, LHP Inc.; Mathew, chief operating officer, LHP Inc., and general manager, LHP Software; Vatcher, president, LHP Software Solutions; and

Stotts, president, LHP Engineering Resources. Finally, a well-devised marketing strategy that capitalized on the synergies of the reorganization was put into action and promoted to both current and potential new customers to highlight the firm's expanding capabilities. LHP had broken from its nearly total reliance on Cummins for its business and it didn't want to go back. The efforts paid off and by 2010, LHP had turned its original fledgling startup into an enterprise of 150 employees and \$13+ million in sales revenue.

FINANCIALS

During the early months of LHP's existence, Glass and Hou kept their "day" jobs and developed the firm during lunch meetings and working evenings and weekends. There were no real overhead expenses and, as such, they didn't have to put a lot of money into the firm. There were no investors; it was a bootstrap operation. Whatever they made, they put it right back into the firm. The first 2-3 years went like this for Glass and Hou.

However, in a shrewd move during that first year, Glass and Hou bought a former Cummins auxiliary office building on Franklin Street in downtown Columbus with their own funds, thus establishing themselves both in the community and with customers. The purchase of that building was the "no turning back" point for both. It also provided an asset for them to draw on later as a credit line, leveraging it to build the current headquarters. "We had too much into it at that point not to continue on," Glass said. And the success with Cummins as a client helped to develop confidence in what they were doing.

The firm was recognized with Indiana Business Growth Awards during 2005-2006 when it grew 100-200 percent annually. That growth fell to 30-40 percent annually thereafter. Engineers made up more than 80 percent of the workforce at LHP and their salaries were the single largest expense. The company paid an entry-level engineer with a Bachelor's degree an average of \$55,000 while one with a Master's degree averaged \$75,000. The remaining salary expense was executive management, which averaged more than \$100,000, and administrative staff, who averaged \$30,000 to \$40,000. Consequently, salary expenses nearly matched annual growth rates at 30 percent. The growth from 22 to 75 employees in the third year was the tipping point in creating sufficient cash flow to cover these salary expenses. Sales revenue of \$1M+ was achieved that year (2003), followed by continued growth in later years (see Table 1).

Table 1: LHP Sales Revenue From 2008-2011

Year	Revenue (\$ in millions)
2008	\$12.7
2009	\$10.7
2010	\$13.3
2011	\$20 (projected)
2016	\$100 (projected)*
*800 employees (projected)	

Source: Glass, David. Personal interview on December 3, 2010.

Building the business beyond Cummins to diversify growth and be able to sustain itself during another recession, if it were to ever happen again, was critical for LHP. It also made it easier to

get business with new companies because of the image it projected in 2010. As Glass and Hou saw it, LHP was viewed as big and stable. “We think we’ve made the investments in that regard,” said Glass. “As this technology sector keeps growing, we’re a very viable business in the economy going forward. We’ve carved out our niche in an area that has a high growth trend.”

MARKETING

Initially, LHP’s marketing was simply Glass and Hou selling themselves to potential customers. It was grass-roots networking with people almost every day, usually through informal lunches. They began holding these meetings together, but the need to talk with so many people led them to splitting off and conducting meetings individually. Their primary focus was to leverage their contacts and relationships with Cummins. While this process worked well early on, they eventually outgrew it with the realization of the need to better connect with other potential customers.

The marketing strategy that came out of the 2008 firm restructuring resulted in a more formal, sophisticated approach focused on LHP’s array of services from software solutions to employee recruiting and placement. Through the help of consultants, the approach included the development of a branding effort with accompanying logo and Internet website (<http://www.lhpsoftware.com>) as well as the formation of a professional sales team made up of individuals skilled in selling technology services. LHP also hired a marketing firm in Cleveland, Ohio with expertise in the industry to help launch its external marketing efforts. By 2010, LHP had the marketing and sales organization in place to deliver on the growth projections for the firm going forward.

RECRUITMENT

The marketing efforts were critical to fulfill the firm’s commitments. While unemployment in general had been an issue in the U.S. economy since 2008, there had been a consistent shortage of engineers on the market with the expertise in LHP’s particular area. “We have to grow that pipeline and target specialties,” Glass said. To that end, the firm visited some 20 universities with the appropriate engineering programs in the fall of 2010, including Trine (Glass’s alma mater), Rose-Hulman, Purdue, Notre Dame, Indiana University-Purdue University Indianapolis, Michigan, Michigan Tech, Case Western, Cleveland State, Cincinnati, Bradley, Ohio State, and Wisconsin. Most of LHP’s new hires, however, came from the existing workforce wherever they could be found, whether domestically or internationally. Glass admitted it was a very competitive market, making LHP’s salesmanship with an emphasis on its differentiation in organizational culture all the more important in its recruiting efforts. Moreover, of course, finding individuals with values that matched LHP’s values was critical as well in order to maintain the organization’s culture.

CULTURE

“Strategy drives our performance; it drives everything,” said Glass. “It’s what drives our investment and growth. We use Balance Scorecard, with reviews twice annually, to measure [that performance] and the integration of our culture in how we do it.”

The business analysis done during 2004 gave LHP a better understanding of its role in the market and how to leverage its organizational culture, both with potential customers as well as employees. Initially, Glass tried an approach from his athletic background similar to a coach putting together a team of all-star players where each one was used to taking the lead. He admitted it didn't work as roles and responsibilities were misunderstood. The following year, LHP focused on hiring employees whose personalities better fit with each other as well as the organization. The reason was obvious. Work was performed using both individual and team-based approaches. For example, a gasoline engine control system project for a Chinese customer was managed by two managers in the United States working with six engineers in India and six in China. Working through obvious language and cultural challenges, considerable communication and collaboration was needed among the participants to make it a successful project. By each member of the team taking ownership of their role in the project, not only did the customer receive a satisfactory solution, but also LHP had found a multi-continent, multicultural work process on which to develop future such projects.

"As owners, we learned that to grow we had to let go of some things and let other people who were better at [a task] do it. But we've got to continue the communication about what we're about. If you say stuff enough times, not forcing it, others pick up on it and begin saying it themselves," said Glass.

"We want employees to focus on the most important goals and who's going to be responsible for them, what the objectives are, and then carry them out. Taking responsibility is one of our core values of the firm."

Values Statement

To emphasize what the firm openly identified as its small-town values, it created and adopted the practice of RAPIIDTM (Responsibility, Achievement, Partnership, Innovation, Integrity, and Diversity) to provide employees clear guidance in management's expectations and the tools necessary to achieve them. For example, according to LHP's RAPIIDTM Culture Statement (see Appendix B), Responsibility meant to not point fingers at others, but rather ask "What can I do?" to solve the issue; Achievement meant to be performance driven and seek excellence; Partnership meant to think about what was best for the customer; Integrity meant to say what you can honestly do, and then do it; Innovation meant to deny mediocrity and take risks; and Diversity meant to first seek understanding in others and treat them with respect.

Work-Life Balance

The firm also emphasized commitment and flexibility to employees, stressing a work-life balance in a field that can be particularly demanding on its participants and their families. "We offer a different kind of work environment," said Glass. "We take a lot of input from our employees and where they want to go in their careers." Additionally, employee amenities included professional housing (17 furnished apartment units) in a building owned by LHP in downtown Columbus as part of the firm's effort to help foreign nationals assimilate easier with the community and culture. Summer interns stayed there as well. Also, there were employee

events such as Christmas parties and picnics as well as in-house food and beverage, even on-site haircuts – all borrowing from some of the practices at many larger technology companies. These conveniences reflected LHP's effort to not only make it a competitive employer, but a fun place to work.

Stressing Respect

In return, Glass and Hou both stressed that employees treat each other with respect – being understanding, fair, honest, and trustworthy – given that LHP was such a diverse organization. Both wanted new hires to fit into the team as well as the organizational culture. Those that did not fit in eventually moved on, voluntarily or otherwise.

The philosophy applied to the selection of customers as well, emphasizing diversity, integrity, and innovation. “We started to gravitate toward certain principles and values that would carry over to other companies,” Glass said. “We targeted certain companies and started to see growth.” Glass credited that growth to the firm's transparency in what it stands for and how it communicates it to customers. He was not threatened by competitors knowing it as well, because he believed the firm's values and integrity offered it differentiation that was not easily replicated. In fact, LHP actually cooperated and collaborated with a few competitors to leverage each other's expertise to deliver specific customer solutions. “We see much more value out of that approach than have been hurt by it,” said Glass. “But has there ever been a time when the other side hasn't bought into our values? Sure, it's happened.”

Community Involvement

An equally important element of LHP's culture was its community involvement, led by Hou's participation on numerous not-for-profit organization boards. Opportunities for managers and employees to get involved in the community were encouraged and supported on an individual basis. Hou noted such involvement was good for LHP. He said the management team and others would come up with their own interests to pursue, resulting in them being more passionate about it, which in turn enhanced the work environment.

LHP's size helped maintain its culture. Typical of a smaller business, everyone knew each other by name; the line of authority was relatively flat; flexibility was evident; and accommodating employees' personal issues was readily apparent while still being fair to everyone else. The challenge would be maintaining that culture as the firm continued to grow, both in the number of employees and in their various office locations.

CHALLENGES GOING FORWARD

In 2010, LHP reached another critical milestone. It now needed to deliver on its ambitious plans for growth by doubling the size of the organization in only a 3-4 month period to meet new customer demand. Faced with more than 200 openings in its own offices and off site at customers' facilities, it devised a Midwest, 10-city recruiting blitz in early December of that year to aggressively begin filling them.

Additionally, Glass said the physical separation of employees was challenging and to resolve at least some of it, the firm was looking to consolidate its facilities in Columbus from the current three sites (the main office and two additional office spaces). The firm owned property just south of Columbus in the Woodside Industrial Park, adjacent to Interstate 65, which could provide sufficient room for a larger consolidated facility to be built.

Finally, with the enormous growth in headcount, maintaining the firm's original core values across the workforce was daunting – but still a priority. Glass said LHP would never put growth ahead of its values and what the firm has stood for since its founding.

“I’m not sure we understand all the challenges we’ll be facing yet,” said Glass. “Managers will be stretched and they’ll need help. They’ll need to step up. Some will be ready and some won’t. Certainly, there is more at risk now than when Ryan [Hou] and I started by ourselves. Now we have something to lose, along with the livelihood of these employees.”

As LHP looked to the next three to five years, many of the challenges it faced would determine its continued growth and success. As Hou and Glass reflected on the situation going into 2011, they had to consider if they were on the right track.

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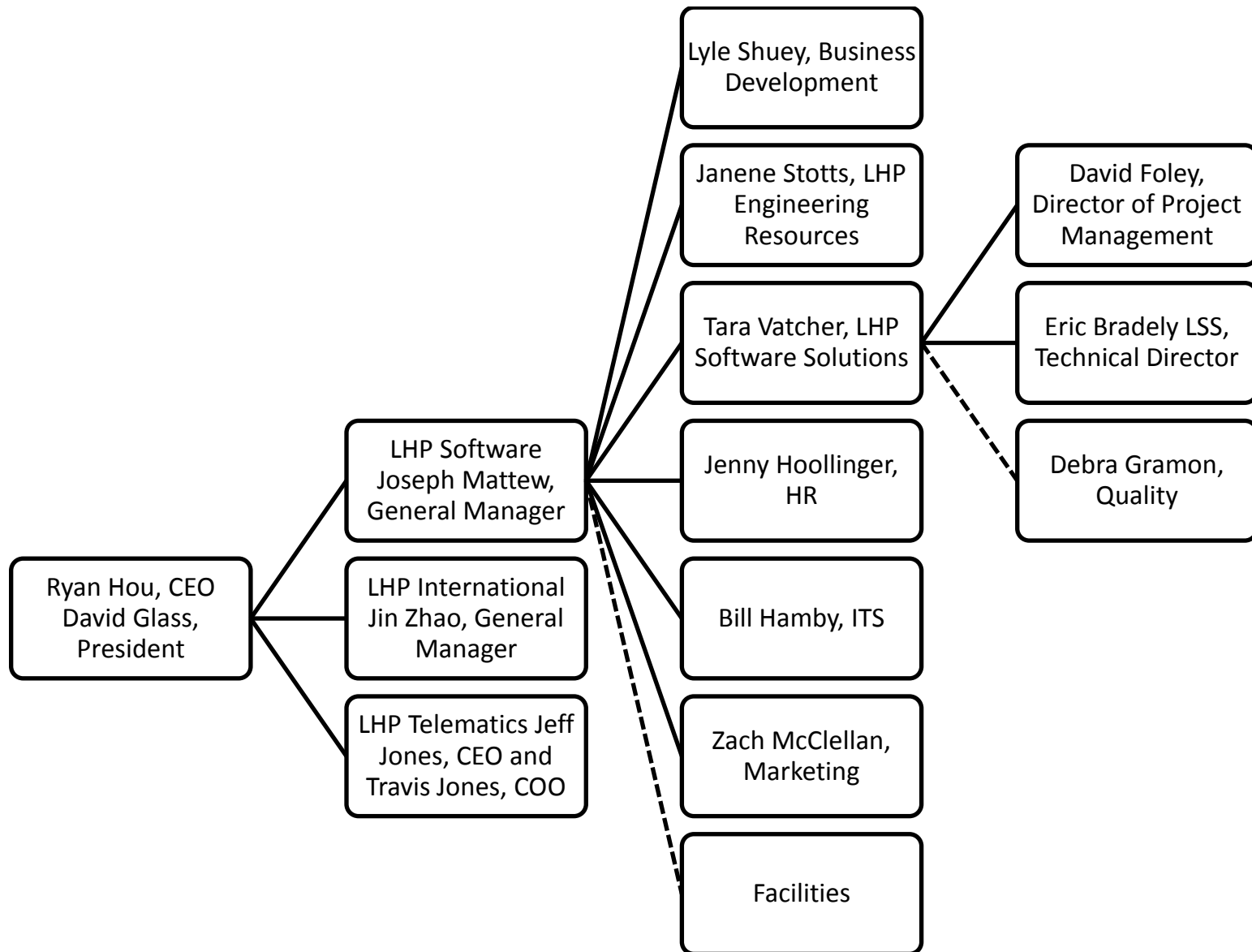
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Appendix A – LHP Organization Chart



Appendix B - LHP Software – RAPIID Culture Statement

LHP Values	Value Statement	Employee Expectations
<u>R</u>esponsibility	Make a positive impact everywhere.	Don't point at others. Be a team player and offer solutions. Ask "what can I do?" Politics and favoritism have no place at LHP
<u>A</u>chievement	Achieve something uncommon.	LHP is a performance driven organization. Excellence will be recognized and rewarded
<u>P</u>artnership	Long-term commitments and friendships are treasured.	Think about what is best for the customer. Anticipate future needs. Develop synergies with everyone
<u>I</u>ntegrity	Do what you say you will do.	Say what you can honestly do, and do it. Confidence and trust are earned.
<u>I</u>nnovation	Lead. Don't follow.	Deny mediocrity. Take calculated risks to achieve great rewards. Look for opportunities to learn something new and drive improvements outside of your immediate assignment
<u>D</u>iversity	Brilliance through differences.	Seek first to understand. Honor everybody and their ideas with respect. Focus on the strengths.